

NEWS ARTICLE ON ONLINE HOUSE TAX BILLING SERVICES USING CLOUD COMPUTING

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ABSTRACT

In the modern world, it is our main responsibility to provide better e-government service to the citizens. Now-a-days government sectors face main problems like security, availability and reliability, scalability. House tax billing to the government office is one of them problem. All citizens are not able to go to the government office and stand in queue and wait for long for paying house tax. Further, there is no facility to pay the house tax online. There are many other problems in government sectors regarding payment and number of paper wastage. So, house tax billing monitoring is the biggest challenge for the government house tax management authorities. Hence, we are proposing the system whose main objective is to reduce the paper work, physical man power effort and all payment issues. We proposed the e-government website using cloud computing model for online house tax billing. It is online gateway to the user who can use anytime and anywhere. Cloud computing plays main role in collecting all information of client and store it into database, upload data using internet onto the cloud and it can access when authorized user would be required for future us., It will also accessible by that user itself. And then calculate the house tax from given information and send email and text draft to the client. Client can pay the bill via online gateway like Google pay. These websites are accessible by users easily on 24/7 hrs basis.

KEYWORDS: *Cloud Computing Model; E-Government; E-Government Challenges*

INTRODUCTION

Now a days, due to an increase in population, basic need of human beings has also increased, which is one of the important aspect in house. Due to increase in population, building and houses are increasing day by day. In this generation, all are busy with their jobs. So, they do not have time for house related work such as house tax billing and water tax billing per year, which is necessary to pay to government office. All through the year government serves a paper notice to each house for paying their house tax bills. For this, both government and house holder face many challenges. It is required to pay bills on the given time, and so house holder goes to the government office and stands in queue and wait till his number comes and then pays the bills. These issues lead to paper waster and physical energy too. For all such issues design the online house tax billing website for government office and which is based on cloud computing. As per the articles in the Times Of India[1], They give idea regarding cloud computing, over the past scenario, technology has update the way many companies conduct their business enabling an unusual level of collaboration, flexibility and productivity. For all industries the internet has been single most helpful way of this century. In a study of all research and surveyed organizations reported that they were already using some form of cloud computing services to expand their business. So that the global cloud services market will grow continuously through 2022, reaching up to \$331 billion. Cloud computing give assurance about

data security, data center management, performance consistency, privacy, availability and reliability, scalability. Cloud computing is used to solve the problem of government office as well citizens also.

LITERATURE SURVEY

Kh.E.Ali*, Sh.A. Mazen, E.E.Hassanein [2] proposed hybrid model for adopting cloud computing in e-government. In which they describe the hybrid model. Which they describe the hybrid model. Which consist local government cloud, Regional government cloud and wide government cloud. Hybrid cloud is a merging of more than one cloud that is private, community and public that remain unique entities but bond together by standardized technology that enables data and application portability.

Singh and Chandel [3] proposed a cloud framework for India government through the integration of the functioning of different departments among the different state under the India National e-government plan. This combination between the separated data centers for each state connected by SWAN that is State Wide Area Networks. These different network can be combined together logically over the cloud so that the authorities may be provided instant access to the desired information without any delays and communication across the states. This connection ensures compatibility functionality among different state and it decrease the operating costs, provide greater accuracy, transparency and imperishable while using latest technologies.

Kumar et al.,[4] proposed a cost effective framework for e-governance in India by using FOSS that is Free and Open Source Software for development and deployment of e-governance applications, virtualization, consolidation techniques for management of e-services and cloud computing for enhancing the accessibility of services among citizens including rural masses. This was lead to decreasing total cost related to hardware as well as software therefore it reduce the financial burden abide by the state and central government.

A Venakatesh [5] gives data storage security issues cloud computing. In this they give cloud computing five characteristics On-demand self-service, broad network access, Resource pooling, Rapid elasticity, Measured Service. They also give idea about how to data is encrypted secure co-processor as part of cloud infrastructure; the system can handle encrypted data efficiently. For security and privacy purpose they issues related to data storage are confidentiality, integrity and availability.

Ahmad Mosa [6] proposed model form e-government to the cloud computing. In these they give information about different e-government function and type of government which are Citizen to Government and Government to Citizen, Business to Government and Government to Business, Government to Employee and Employee to Government, Non-profit to Government and Government to non-profit these all required cloud to store their data for that they used different cloud computing layers like Infrastructure as a Service (IAAS), Platform as a Service (PAAS), Software as a Service (SAAS).

Proposed System

The main purpose of the online house tax payment system is to save paper work reduce man power of government office and citizens physical hard work also they can use these website anytime 24/7hrs. For that government office store all the data of citizen and house details on paper previously but now in these system all the data are stored into the cloud which government officers upload through internet and when they required user data they can access through cloud. To create a website we use different technologies:

Hyper Text Markup Language 5(HTML5) is used for modeling purpose which include elegant Form, User interface enhancement, decreased need for JavaScript and Form validation native to HTML. For greater consistency, we adopt HTML5

to code a webpage on one site compared to another, CSS3 is used for designing website in that five main uses are consistency, reduction, search engines, browser compatibility, viewing option, JavaScript is used for coding it shows the behavior of website. PHP and MySQL is create database, AJAX and Laravel is used for authority and validity purpose.

Proposed System Architecture

The figure show the system architecture of online housing tax system through cloud computing. Following steps are as follows:

- User fills all the data and all data are stored into the database.
- All data stored into the database and that all will upload on cloud.
- When authorized person required any information about the customer then authorized person can access it.
- After putting all the customer details in the housing tax, then calculation formula that we used in this housing website.
- After calculating customer housing tax using formula the authorized person send amount to the customer through mail.
- Customer can decide what payment method he/she will use.
- He / she goes to the nearest housing tax department and pay either by cash or through net banking, or using Debit card / credit card.

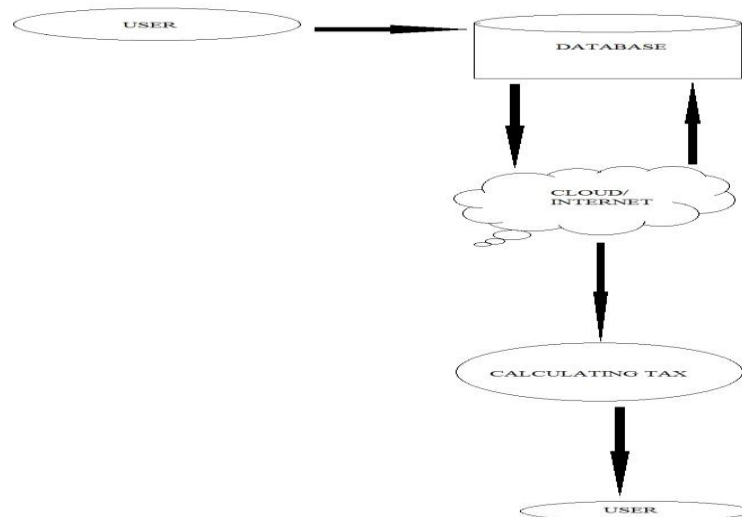


Figure1: System Architecture.

METHODOLOGY

It is flexible to customer to use this website and customer can fill the detail anytime anywhere. Quality control in this data will access by authorized user. There are two method to pay the housing tax. First is customer can use cash method and second method is to pay the tax online using online housing tax payment which customer can use anytime, anywhere using net banking, debit card or credit card. In this project we using the second method to pay the tax. To fill the customer detail for online housing tax payment they need Annual value of property, Dimension of property, Build up area, Location.

RESULTS

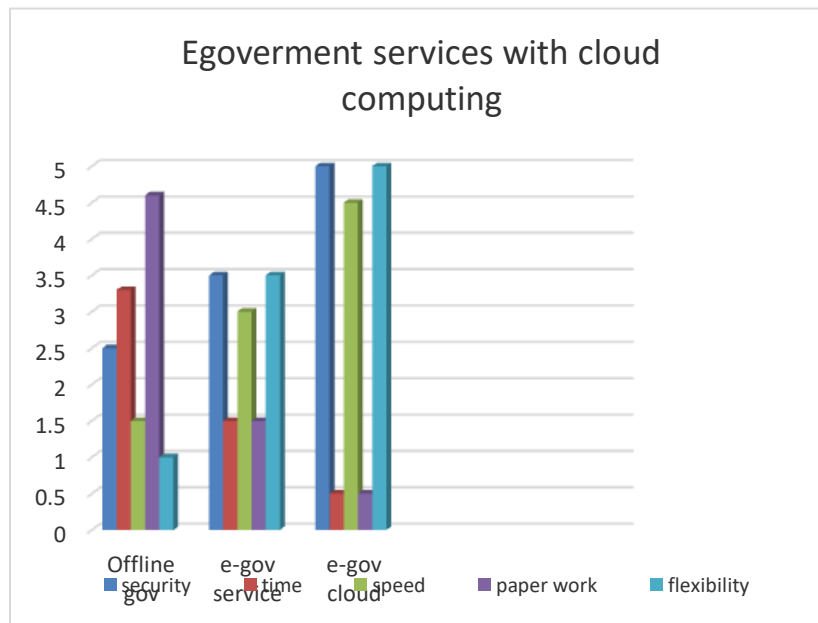


Figure 2: E-Government Service with Cloud Computing.

CONCLUSIONS

Our country faces many issues related government work, there are so many details about all the citizen and all that detail is stored in paper and there are so many chances to lost all those information after some years so we proposed cloud computing to store all the data to citizen which authorized person can access when they required it reduce paper work. for all online tax related payment issues is solve it save man power as well as time This paper proposed an abstract hybrid model to modify cloud computing in e-government which then further identifies and classifies e-services according to some specific domains. This paper analyses some of the cloud computing and e-government specifications, and some obstacles that may lead to failure in e-governments projects and how can cloud computing can overcome these difficulties. In addition, this paper also proposed model identified three types of governmental cloud computing they are Local Governmental Cloud that is LGC, Regional Governmental Cloud that is RGC and Wide Governmental Cloud that is WGC. E-service is ready now to marge into cloud and which will be delayed sometimes, therefore it prioritizes the e-services to be merged into proposed governmental clouds. Finally, it recommended a set of cloud aspects and their values for each of three proposed governmental clouds.

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REFERENCES

1. <https://m.timesofindia.com/business/international-business/cloud-computing-do-you-really-need-it-this-will-help-you-decide/articleshow/72467203.cms>.
2. Kh. E. Ali *, Sh. A. Mazen, E. E. Hassanein for a proposed hybrid model for adopting cloud computing in e-government.
3. Singh VJ, Chandel A. Evolving e-governance through cloud computing based environment. *Int J Adv Res Comput common Eng* 2014; 3(4): 6188–91.
4. Kumar P, Kumar D, Kumar N. Improved service delivery and cost effective framework for e-governance in India. 2003.
5. A Venjantesh*, gives Data storage security Issues in cloud computing.
6. Ahmad Mosa give cloud computing in E-government : A Survey.
7. Miller, M. (2008). *Cloud computing: Web-based applications that change the way you work and collaborate online*. Que publishing.
8. Höfer, C. N., & Karagiannis, G. (2011). Cloud computing services: taxonomy and comparison. *Journal of Internet Services and Applications*, 2(2), 81–94.

